

1. An improved emulsifier system for use in producing dehydrated starch ingredients wherein the emulsifier system comprises a polyglycerol ester having a polyglycerol backbone of from 2 to about 10 glycerol units wherein not more than about 40% of the hydroxyl groups of the polyglycerol are esterified with fatty acids (hereafter "PGE").

2. An emulsifier system of Claim 1 wherein at least about 80% of the PGEs, by weight, have a polyglycerol backbone of from 2 to about 5 glycerol units.

3. An emulsifier system of Claim 1 wherein at least about 80% of the PGEs, by weight, have a polyglycerol backbone of 2 or 3 glycerol units.

4. An emulsifier system of Claim 1 wherein from about 20% to about 35% of the hydroxyl groups of the polyglycerol are esterified with fatty acids.

5. An emulsifier system of Claim 1 comprising PGEs wherein at least about 80% of the ester groups are derived from saturated fatty acids.

6. An emulsifier system of Claim 5 comprising PGEs wherein the ester groups are derived from one or more of C₁₄, C₁₆, C₁₈, C₂₀, and C₂₂ fatty acids.

7. An emulsifier system of Claim 1 wherein the emulsifier system contains not more than about 15% free polyglycerol.

8. An emulsifier system of Claim 1 comprising a material selected from the group consisting of 2-1-P, 2-1-S, 3-1-P, 3-1-S, 4-1-P, 4-1-S, and mixtures thereof.

9. An emulsifier system of Claim 1 further comprising monoglyceride.

10. An emulsifier system of Claim 1 further comprising a lecithin.

11. An emulsifier system of Claim 10 comprising from about 1% to about 25% lecithin, and from about 75% to about 99% PGE.

12. An emulsifier system of Claim 10 further comprising monoglyceride.

13. An improved emulsifier system for use in producing dehydrated starch ingredients wherein the emulsifier system comprises a DATEM.

14. A process for making dehydrated potato ingredients comprising the steps of:

- (a) cooking potato pieces;
- (b) forming the cooked potato pieces into a potato mash;
- (c) drying the potato mash to provide dehydrated potato ingredients;
- (d) optionally comminuting the dehydrated mash; and
- (e) adding an emulsifier system anytime prior to formation of the dehydrated potato ingredients in step (c);

wherein the emulsifier system comprises an emulsifier selected from the group consisting of (i) a polyglycerol ester having a polyglycerol backbone of from 2 to about 10 glycerol units wherein not more than about 40% of the hydroxyl groups of the polyglycerol are esterified with fatty acids (PGE), (ii) a DATEM, and (iii) mixtures thereof.

15. A process according to Claim 14 wherein the emulsifier system comprises a PGE and wherein at least about 80% of the PGEs, by weight, have a polyglycerol backbone of from 2 to about 8 glycerol units.

16. A process according to Claim 14 wherein the emulsifier system comprises a PGE and wherein at least about 80% of the PGEs, by weight, have a polyglycerol backbone of from 2 to about 5 glycerol units.

17. A process according to Claim 16 wherein the emulsifier system comprises a PGE and wherein at least about 80% of the PGEs, by weight, have a polyglycerol backbone of 2 or 3 glycerol units.

18. A process according to Claim 14 wherein from about 20% to about 35% of the hydroxyl groups of the polyglycerol are esterified with fatty acids.

19. A process according to Claim 14 wherein the emulsifier system comprises PGEs wherein at least about 80% of the ester groups are derived from saturated fatty acids.

20. A process according to Claim 19 wherein the emulsifier system comprises PGEs wherein the ester groups are derived from C₁₆ fatty acids, C₁₈ fatty acids, or a mixture thereof.

21. A process according to Claim 14 wherein the emulsifier system contains no more than about 15% free polyglycerol.

22. A process according to Claim 14 wherein the emulsifier system comprises a material selected from the group consisting of 2-1-P, 2-1-S, 3-1-P, 3-1-S, 4-1-P, 4-1-S, and mixtures thereof.

23. A process according to Claim 14 wherein the emulsifier system further comprises monoglyceride.

24. A process according to Claim 23 wherein the ratio of PGEs to monoglyceride is from about 9:1 to about 1:9.

25. A process according to Claim 14 wherein the emulsifier system further comprises a lecithin.

26. A process according to Claim 25 wherein the emulsifier further comprises monoglyceride.

27. A process according to Claim 25 wherein the emulsifier system comprises from about 1% to about 25% lecithin, and from about 75% to about 99% PGEs.

28. A process according to Claim 14 wherein the emulsifier system comprises a DATEM.

29. A process according to Claim 14 wherein the emulsifier system comprises diglycerol monoester, triglycerol monoester or a mixture thereof.

30. A process according to Claim 29 wherein the emulsifier system comprises diglycerol monoester and triglycerol monoester and wherein the diglycerol monoester and triglycerol monoester together comprise at least about 50% of the total weight of the emulsifier system.

31. A dehydrated starch ingredient comprising an emulsifier selected from the group consisting of (i) a polyglycerol ester having a polyglycerol backbone of from 2 to about 10 glycerol units wherein not more than about 40% of the hydroxyl groups of the polyglycerol ester are esterified with fatty acids (hereafter "PGE"), (ii) a DATEM, and (iii) mixtures thereof.

32. A dough composition comprising:

- (a) from about 35% to about 85% of a starch-based flour comprising a dehydrated starch ingredient of Claim 31;
- (b) from about 15% to about 50% added water; and

- (c) optionally a dough emulsifier.
33. A process for making a fabricated snack comprising the steps of:
- (a) forming the dough composition of Claim 32 into a sheet;
 - (b) cutting snack pieces from the sheet; and
 - (c) frying the snack pieces in an oil.
34. A food product comprising the dehydrated starch ingredient of Claim 31.
35. A food product of Claim 34, wherein said food product is selected from the group consisting of mashed potatoes, potato soup, and potato sticks.
36. A food product of Claim 34, wherein said food product is a snack food product.
37. The snack food product of Claim 36, wherein said snack food product is a fabricated snack.